# V. On some New Zealand Coleoptera. By D. Sharp.

#### [Read March 1st, 1882.]

A SMALL parcel of Coleoptera, received a few weeks since by me from Mr. Helms, of Greymouth, New Zealand, has proved, on examination, to contain such a large proportion of new and interesting forms as to make me believe that it would be acceptable to entomologists that I should briefly define and record some of them. Hence

the present paper.

The idea formerly universally accepted, to the effect that the New Zealand fauna is poor in insects, is now, so far as regards the order Coleoptera, shown to have been completely erroneous. Some 1400 or 1500 species of this order are now recorded from the islands in question, and yet a considerable proportion of the species found by Mr. Helms in the neighbourhood of his residence prove to be new. And there can, indeed, be little doubt but that the number of existing species in the islands will amount to three thousand, or even more,—not improbably nearer to four thousand.

Under these circumstances, the publication in 1880\* of a Manual of New Zealand Coleoptera by the Colonial Museum and Geological Survey Department of the Colony, must clearly be characterised as premature, and has indeed been proved so by the additions of some hundreds of species made since its appearance. The volume contains descriptions of 1141 species, a considerable proportion of which are reprints of papers or works that have appeared elsewhere, many of them quite recently, while the remainder—to the number of fully 500—have been drawn up by Capt. Thomas Broun, whose skill and enthusiasm as a collector are deserving of the highest praise and warmest encouragement, but whose

<sup>\* &#</sup>x27;Manual of the New Zealand Coleoptera.' By Capt. Thomas Broun. Published by Command. Wellington, 1880.

74

qualifications as a systematic writer are unfortunately not substantiated by the work I am alluding to. Indeed so grave are the defects of the work in question that I feel sure all entomologists who, like myself, have given some attention to it, will share with me a feeling of regret that it should have been published in its present While expressing great satisfaction that the Colonial Museum Department of New Zealand should be able and willing to devote a small portion of the public funds to the promotion of a knowledge of the more obscure and neglected branches of Natural History, we must at the same time urge that some discretion should be used in its employment, and care should be taken as to the nature of the work produced. Dr. Hector, in a few words of preface, speaks of the work in question as "a monument of the zeal and industry of an ardent naturalist," and in so doing he expresses, I believe, a genuine feeling in which all will agree with him; but the zeal and industry of two or three years of human life are quite insufficient for the accomplishment of a large and arduous task in scientific research; while the results of encouraging any one to pursue a task whose accomplishment is beyond the means, the time and the material at his disposal, are sure to be unfortunate. Most haste less speed is an admirable saying, when a number of workers are engaged in a common task, and where the haste and confusion of one of the number may cause great delay in the progress of the whole band. This is eminently the case with the Manual of New Zealand Coleoptera: it is premature, it is totally useless to the uninitiated or unskilled entomologist, while to workers like myself, instead of being an assistance, it is an obstacle to the promotion of knowledge. The systematic portions of the work are abbreviated translations from Lacordaire's 'Genera of Coleoptera,' and they are useless for the purpose to which they are applied for two reasons: first, because they are extremely fragmentary. and are unaccompanied by the tables, which are a most useful and indispensable concomitant of Lacordaire's admittedly and necessarily artificial or imperfect classication; and second, because scarcely any New Zealand insects were known to Lacordaire, and had they been they would necessarily have modified his system; while, as matters stand, the New Zealand student will imbibe the unfortunate idea that there is something wrong about

the New Zealand beetles, for they do not seem to reflect credit on the classifications into which they are to be forced. While the work is thus premature and unfortunate in its conception, its execution is perhaps even more deficient. Taking as an instance almost the first page —the commencement of the Carabides on p. 6—we find the family commences with the group Migadopida, which is supposed to be characterised by the words, "Mesothoracic epimera not reaching the middle coxe"; this is unfortunately exactly the opposite of the truth, and what should have been written was "Mesothoracic epimera reaching the middle coxe." Even, however, if the writer had not fallen into this profound error of expression, and had given the definition correctly, it would have been quite insufficient and misleading, for in the definitions of the other groups of the family no mention whatever is made of this character; and thus, although the two first groups of New Zealand Carabides, viz., Migadopida and Scaritida, differ from all the other groups by the point alluded to, this fact is concealed, not expressed by the work in question. This is a fair sample of the mode of execution of the work. I find, as another example, the Lucanida, which I have had occasion to test specially, to be very deficient as regards the number of species recorded, the synonymy, and the referring of the older species to their correct genera; and if the Lucanida are in this state, what the condition of the more difficult groups may be can scarcely be imagined, but it is certainly very bad indeed; species belonging to previously-described genera are placed either in wrong old genera or in new genera, while a constant feeling of annoyance is occasioned by the fact that the original parts of the work are not distinguished from the reproduced parts, so that one never knows without collation, except by an inference which may or may not be correct, whether any particular passage is due to the author, or is a reproduction from some one else; and the pronoun "I" in the book means very various writers.

I make these remarks in no spirit of captious criticism; it would give me the most hearty pleasure to acknowledge a real increase of knowledge about New Zealand beetles, and to congratulate the Colonial Museum Department on assisting in the promotion of such knowledge, and it is in the hope that Captain

Broun will in future work "ohne Hast aber ohne Rast," and, by limiting his ambitious programme, increase his powers of useful performance, and so make a real addition to a knowledge of the New Zealand fauna, that I have felt it right to speak as above. Let him deal with each family separately, and give us a careful study

of its New Zealand species.

That the New Zealand beetles are of great scientific importance, and that there is very great danger that a considerable proportion of them will be soon completely extirpated is certain; and intelligent beings, who will collect and carefully preserve the rarer forms are doing now a work which will be impossible in the future; and when the specimens are so collected and preserved, it is, and will be, a work of great magnitude and difficulty to study them and learn from them all that is to be learned: thus it is important that the earlier works on the subject should not encumber it with unnecessary difficulties, and so put preliminary obstacles in the way of future students; we shall never get beyond mere nomenclature if this be made so difficult as to claim all the powers and time the student has at his disposal.

As regards the forms described and characterised in the present memoir, I believe they will be found to make a real though slight addition to our knowledge; the existence in New Zealand of a genus of Rhinomacerides, and of two genera of true Chrysomelidæ, as well as of a genus of Colydiidæ, allied to the anomalous European Langelandia, and connecting it with the Tarphii, are facts of considerable importance and novelty; while, as regards the other forms, they will, I think, be easily recognised from my descriptions, although the certain position of one or two genera will be perhaps for some time a doubtful question. Certain of the species are described because they have already been more or less widely distributed under the names I have applied to them.

# The following is a list of the genera and species:—

CARABIDÆ. Scopodes nigrinus. Silphidæ. Choleva lugubris. TROGOSITIDE, Grynoma regularis. COLYDIIDÆ. Tarphiomimus wollastoni. Chorasus (n.g.) subcæcus. Acosmetus reitteri. Byrrhidæ. Nosodendron zealandicum. Lucanidæ. Ceratognathus dispar. SCARABÆIDÆ. Sericospilus (n.g.) advena. Mesanobium (n.g.) debile. MALACODERMES. Dasytes helmsi.

DASCILLIDÆ. Cyphon variegatus. ŒDEMERIDÆ. Techmessa distans. RHYNCOPHORA. Rhinorhynchus (n g.) zealan-Anagotus (n.g.) helmsi. Pentarthrum helmsianum. LONGICORNES. Didymocantha robusta. Somatidia helmsi. Xulotoles huttoni. Hybolasius deplanatus. Tetroræa sellata. discedens. Mesolamia (n. g.) marmorata. Рачторнаса. Chalcolampra speculifera. Allocharis (n.g.) marginata.

## Scopodes nigrinus, n. s.

Gracilis, nigerrimus, subopacus, parum sculpturatus, antennis articulis 2—4 plus minusve testaceo-tinctis; oculis valde prominulis; thorace subtiliter strigoso, haud nitido, profunde canaliculato, angulis posterioribus obsoletissimis; elytris irregulariter parum profunde striatis, versus suturam foveolis tribus parvulis. Long. 4 mm.

Head rather narrow for this genus, but the eyes excessively prominent, the space between them not great, somewhat finely, but very definitely, strigose. Thorax small, the surface only obsoletely strigose, with a channel along the middle, which, seen in one direction, appears very deep, and with anterior transverse depression, the front angles very rounded, the lateral margin very distinct, and bearing in front of the middle an angular prominence, behind this narrowed in a straight line to the base, and there the margin is very slightly turned inwards, becoming quite obsolete close to the angle. Elytra with the surface uneven, owing to indefinite striation, and with three very indistinct impressions near the base.

Greymouth; No. 188, Helms.

#### Cholera lugubris, n. s.

Ovalis, posterius attenuatus, densissime subtilissimeque pubescens, opacus, niger, antennarum basi rufoobscuro; vix perspicue punctatus, sed elytris confertim transversim strigulosis. Long.  $2\frac{3}{4}-4\frac{1}{4}$  mm.

Antennæ rather longer than head and thorax, rather stout, a good deal thickened towards the apex; 7th joint rather longer than any of the others, rather longer than broad; 8th much smaller than the contiguous joints; 9th and 10th each about as long as broad. Thorax very finely punctured and pubescent, a good deal sinuate at the base on each side, so that the hind angles appear prolonged backwards. Elytra with a distinct sutural stria, and rather closely transversely strigose. Spurs of hind tibiæ elongate.

The male has the front and middle tarsi greatly dilated. The species apparently varies much in size.

Greymouth; Mr. Helms.

There can be no doubt that this insect is congeneric with *Cholera antipodum*, Kirsch, but whether it be so with our European species I cannot decide at present. *C. lugubris* resembles a good deal the European *C. coracina*, though very distinct by its sculpture.

#### Grynoma regularis, n. s.

Oblonga, subparallela, parum convexa, fuscula; elytris ferrugineo-variegatis; pube tenui erecta vestita; elytris pube albido-micante ornatis, punctis magnis fere seriatim dispositis sat distantibus. Long.  $5\frac{1}{2}$  mm.

Of rather parallel and elongate form. Antennæ black. Head about half as broad as the thorax, its sculpture dense, but much concealed by an elongate pubescence. Thorax very transverse, twice as broad as long, the sides rounded, becoming a little broader from the front to near the base, and thence a good deal narrowed, the hind angles definite and not far from being rectangular; the surface densely sculptured, and pubescent like the head. Elytra nearly black, much variegated with pale red, and with a very conspicuous maculation caused by patches of shining white down; the surface bears large and deep round punctures; these are not close together, and are not altogether regularly arranged; from each springs a

slender, elongate, erect seta. Under surface and legs nearly black; tarsi obscure reddish.

Greymouth; No. 191, Helms.

This species is very readily distinguished from the others of the genus by its more elongate parallel form, and the very different elytral sculpture. It no doubt varies in colour to a considerable extent.

## Tarphiomimus wollastoni, n. s.

Oblongus, superne valde inæqualis, squamulis subvariegatis dense vestitus; prothorace basi gracili, lateribus anterius explanatis, in lobis tribus divisis; pedibus sat gracilibus. Long. 4 mm.

This species is very similar to T. indentatus, Woll., but is perfectly distinct therefrom by some important minor points. The thorax has the sides divided in front into three lobes, the posterior fourth lobe seen in T. indentatus being here absent, and thus the basal portion of the prothorax appears more elongate and slender. The elytra are even more uneven than in T. indentatus, but their disc is flatter, owing to the fact that the irregular oblique elevation extending from about the middle of the suture directly towards the shoulder in T. indentatus is absent in T. wollastoni. The legs are considerably more slender in T. wollastoni.

Greymouth; No. 61, Helms.

# Chorasus, n.g. (Colydidarum).

Corpus subangustum, haud convexum, nudum. Antennæ breviusculæ, 10-articulatæ, articulo primo condito, clava abrupte biarticulata. Caput exsertum, oculi minuti, canalicula suboculari maxima. Prothorax subtus ad angulos anteriores maxime impresso. Prosternum magnum; coxæ minutæ, globosæ, sat distantes. Metasternum parum elongatum; coxæ intermediæ sat distantes, posticæ paulo magis distantes. Abdomen ex segmentis quinque subæqualibus compositum, suturis profundis. Pedes sat graciles, mutici; tarsi 4-articulati, haud elongati, articulo basali quam 20 paulo longiore, 20 et 30 brevibus, 40 quam ceteris paulo longiore.

The affinities of this little insect with the anomalous European Langelandia are undoubted; the antenuæ and

head (including, so far as I can see, the parts of the mouth) are extremely similar in the two genera, except that the eyes are totally wanting in Langelandia, and are present, though extremely reduced in size, in Chorasus. The structure of the under surface is similar, except that in Chorasus the epipleuræ are broad and nearly horizontal, and the ventral segments are comparatively shorter. The tarsi are undoubtedly 4-jointed. The claim of Langelandia to be admitted into the Colydiidæ is absolutely confirmed by this most interesting insect.

#### Chorasus subcæcus, n.s.

Piceus, pedibus piceo-rufis, antennis rufis, opacus, quasi squamatim-granuloso, elytris longitudinaliter costatis; prothorace magno, margine anteriore utrinque profunde sinuato, in medio setuloso. Long.  $2\frac{3}{4}$  mm.

Head with a comparatively shining space on the middle, impressed on either side of this. Thorax large, about as long as broad; owing to the deep sinuation on either side of the front margin, the middle has the appearance of being produced, and this prominent part bears closely-set, curled upwards, pale setæ; behind this is an indistinct longitudinal impression, and the surface shows a very peculiar sculpture, something like scales, or as if there had been tubercles shaved off. The elytra are scarcely twice as long as the thorax, and are somewhat narrowed behind, and a little truncate at the extremity; they bear a sculpture somewhat similar to that of the thorax, except that they are smaller, are less definite, and are suboblong instead of round; from the base there starts a rather sharply elevated longitudinal elevation, which extends two-thirds of the length, and external to this are one or more very much shorter and more indistinct elevations.

This creature is, notwithstanding its small size, one of the most interesting of Mr. Helms' discoveries at Greymouth.

## Acosmetus reitteri, n.s.

Subquadratus, crassus, elytris elevatis, fucco-niger, superne in elytris tuberculis maximis et inæqualiter fulvo-tomentosus, setulisque erectis adspersus, antennis pedibusque rufis. Long. 4, lat. 2<sup>3</sup>/<sub>5</sub> mm.

Antennæ rather stout, quite red; club strongly triarticulate. Thorax very uneven, sinuate on each side in front, so that the middle much covers the head, narrowed in front, the surface much hispid, especially at the sides, the side behind the middle divided by a deep transverse fissure; the part in front of this fissure is produced backwards, so as nearly or quite to touch the portion behind the fissure, and so as to leave internal to this point of contact a window or opening through the surface of the thorax, which however is frequently concealed by being filled up with an exudation, or with the vegetable substance amongst which the insect lives; in front of the hind angle the thorax is much narrowed, and the hind angle projects backwards as a large triangle. Elytra with very large and greatly elevated tubercles, which bear a coarse tomentum; between the tubercles are numerous, rather indefinite but large, punctures or pits, and the surface is also sprinkled with numerous conspicuous erect setæ. Under surface opaque, but without clothing. Tibiæ setose externally.

Greymouth; No. 65, Helms.

This very remarkable insect I first received from Mr. Reitter, of Vienna, and, supposing it might go into the genus Syncalus, proposed to call it Syncalus Reitteri. I find, however, it departs much from Syncalus by the more approximate middle and hind legs, and I have therefore called it Acosmetus Reitteri, as it agrees tolerably well with the characters assigned by Broun to this generic name. Whether it be really congeneric with Broun's two species of the genus is doubtful, as I have seen neither of them.

## Nosodendron zealandicum, n. s.

Ovale, convexum, nigerrimum, sat nitidum, antennis tarsisque piceis, vix pubescens, dense punctatum, et in elytrorum parte basali punctis seriatis parum conspicuis. Long. 5—6 mm.

Head rather elongate, densely punctate. Thorax short and broad, very closely applied to the elytra, and continuous in outline with these, very transverse, regularly narrowed from the base to the front. The surface very densely punctate. Punctuation of elytra finer and not so dense as that of the thorax, so that the surface is distinctly shining, although, when carefully examined, a very fine minute pubescence is found to exist; and, in addition to this diffuse punctuation, there exists some abbreviated series of fine punctures on the basal portion. Under surface rather regularly and distinctly punctate, the head more densely than the other parts, and with a longer and more conspicuous pubescence. Antennæ obscure red, with darker club; the 1st joint concealed under the side of the head; 2nd joint short and stout; 3rd very slender and elongate, as long as the three or four following joints together; 8th excessively short, lenticular; 9th to 11th forming an elongate club, very densely covered with fine sensitive pubescence.

Greymouth; No. 210, Helms.

Species of this genus are widely distributed in both hemispheres. Broun ('Manual,' p. 242) has described a Nosodendron ovatum, which is no doubt a very distinct species from that here described, and may even be generically distinct. The New Zealand insect has the tibiæ less remarkably formed than in any of its allies I have seen.

## Ceratognathus dispar, n. s.

. Parvus, subdepressus, opacus, niger, supra fortiter parum profunde punctatus, squamulis sordidis parce vestitus, antennarum basi rufo-obscuro. Long.  $6\frac{1}{2}$ —8 mm.

Mas. Mandibulis parum elongatis, spatio aperto magno inclaudentibus, versus apicem triacuminatis; antennarum clava sat elongata.

Fem. Capite angustissimo, exserto; antennarum clava perbrevi.

This is a curious species, and the sexes are very unlike,

even as regards colour, sculpture, and clothing.

In the male the head is about half the width of the thorax, its anterior angles very prominent, the mandibles not quite so long as the head, and curved so as only to come into contact with one another at the tips, and so appearing from above to enclose a comparatively large vacant space; the upper surface of the head bears coarse round punctures, and some erect hairs or scales; these are most conspicuous behind the eyes. The maxillary

palpi are elongate. The thorax possesses numerous distinct punctures nearly evenly distributed on its surface, except that they are wanting on a line along the middle, and it has also some pale depressed clay-coloured The elytra are sculptured like the thorax with distinct distant punctures, and bear a few clay-coloured scales, distributed in an irregular manner, and also some dark scales, easily overlooked in consequence of their similarity to the ground colour. The club of the antenna is in this sex nearly as long as the rest of the antenna. The female has the head very narrow, narrower in front than at the neck, the eyes very small, the mandibles short but porrect, the maxillary palpi yellow, shorter and thicker than in the male. The surface of the head is coarsely and closely punctate, and bears rather numerous ashy-coloured setæ or scales. The thorax is also rather coarsely and closely punctate, and bears numerous elongate, narrow, ashy-coloured scales; the sculpture and clothing of the elytra are similar to those of the thorax. In this sex (to judge from a single individual) the colour of the legs and antennæ is paler than in the male.

This curious little Lucanid cannot properly be placed either in *Mitophyllus*, of which it has the legs, or in *Ceratognathus*, with which it agrees in some other points; but as there are, no doubt, other species to be discovered in New Zealand, and as the limits of the genera of *Æsalides* are difficult to determine, it had better remain at present in *Ceratognathus*. *Ceratognathus albo-guttatus*, Bates, still, I believe, unique in collections, is probably an allied species.

## Sericospilus, n. g. (Heteronycides, Lacord.)

Corpus elongatum, haud pubescens, subtus nitidum. Oculi convexi. Antennæ 8-articulatæ, articulo 30 quasi in medio articuli quarti faciei interni inserto, hoc elongato, sed articulo quinto multo breviore, articulis 5—8 valde elongatis, longius densiusque setulosis, clava elongata tenui formantibus. Ligulæ pars anterior angusta; palpi maxillares elongati. Metasternum elongatum. Unguiculi simplices.

This genus is allied to *Odontria*, but is distinct by a number of characters. The elongate form, the bare

under surface, the elongate metasternum, the narrow ligula, and more elongate maxillary palpi are abundantly sufficient for generic distinction. The form is very similar to that of the Patagonian genera, Sericoides and Listronyx, and it is probable that, notwithstanding the slight difference in the porrection of the labrum, it is more allied to them than it is to Odontria. Listronyx has a similarly-formed club of the antenna, except that it is 5- instead of 4-jointed. It is probable that Lacordaire pursued an erroneous course in uniting White's genus Eusoma with Odontria, but as I am not acquainted with the insect described by White I cannot speak with decision as to this.

## Sericospilus advena, n. s.

Suboblongus, parum convexus, fere parallelus, supra opacus, subtus sat nitidus, haud vestitus, corporis margine laterali setuloso, capite anterius ferrugineo, posterius nigricante; prothorace irregulariter punctato, fuscoferrugineo, lateribus dilutioribus; elytris ferrugineis nigro quasi marmoratis, plagis his nigris, lateraliter visis, opalescenti-micantibus, pectore pedibusque testaceis; tarsis elongatis, gracilibus. Long. 13, lat. 6 mm.

The colour and sculpture of the wing-cases is peculiar; they have a rather indefinite but not coarse punctuation, which is not arranged in series, and they are indistinctly costate longitudinally, the appearance of being ribbed being caused apparently quite as much by the arrangement of the colours as by elevation of the surface; the colour is obscure yellowish, but there are numerous patches of dark colour arranged in a serial manner; these patches are of irregular outline, and those in each series tend to be connected with one another; seen in a certain light the elytra assume in consequence of these patches a brilliant appearance. The sides of the breast are rather closely punctate. I have five individuals before me, but can detect no sexual distinctions.

Greymouth; No. 126, Helms. New Zealand; No. 1860, Henry Edwards, Esq.

## Mesanobium, n.g.

Caput parvum, valde inflexum, oculis minoribus sed convexis. Antennæ 11-articulatæ, quasi simplices, articulis inter se parum dissimilibus, nec serratæ, articulis ultimis nullo modo elongatis. Prothorax parvulus, supra æqualis, lateribus haud marginatis, prosterno brevissimo, coxis fere contiguis. Mesosternum simplex; pedes intermedii sat distantes. Metasternum haud impressum.

Head very short, greatly inflexed; the eyes small, but prominent and nearly circular; the mandibles largely exposed in front of the clypeus (terminal joint of maxillary palpus apparently narrowly oval, with slightly acuminate extremity). Antennæ rather small, 11-jointed, the first joint swollen and glabrous, the others finely setose and pubescent; 2nd joint rather stouter than the following, but not longer than it; 3rd slender; 4th slightly less slender; 5th a little longer than 4th; 6th to 11th differing very little from one another; the 10th and 11th each about as long as broad. Prothorax not produced in the middle in front, but, as the pronotum is greatly longer than the prosternum, having the appearance of being so produced when viewed laterally. Prosternum very reduced in size, but simple, not hollowed; the front coxe small, and nearly contiguous, but separated by a slender band; the pronotum not limited from the side portions. Middle coxe moderately distant, the space between them not impressed. Tarsi rather long and slender, but getting slightly broader from the base to the 4th joint.

This minute and unattractive insect is one of the least differentiated of the forms of Anobiidæ. It has the appearance, colour, and sculpture of the genera Dryophilus and Priobium, and may be placed between them if the antennæ be disregarded, but differs from both the genera named by the structure of these organs; no other position can be suggested for the insect, and, as I consider that too great an importance has been attached to the antennæ in comparison with other parts of the structure in the Anobiadæ, I think its place should really be that I have mentioned. Broun (Man. N. Zealand Col., p. 687) has described an insect under the name of Sphinditeles, which may possibly be allied to this, but as

he does not allude in any way to the sternal structure—the most important of all the characters in this group—it is impossible to come to any decision on the point.

#### Mesanobium debile, n. s.

Fuscum, supra rufescens, antennis pedibusque rufis, corpore supra opaco, dense subtilissime sculpturato, pube tenuissima depressa vestito. Long.  $2-2\frac{1}{4}$  mm.

Prothorax a good deal narrower than the elytra, above about as long as broad, convex, rather narrowed from the middle towards the front; surface sculptured with very dense, fine, minute, granulations. Elytra very finely granulose, like the thorax, but possessing in addition numerous very minute and obscure small punctures, giving rise, under careful examination, to the appearance of a rudimentary striation. Ventral segments finely, closely, and evenly punctate.

Found by Mr. Helms at Greymouth. I have three individuals before me, but I can detect no certain sexual differences.

#### Dasytes helmsi, n. s.

Elongatus, angustulus, postice latior, opacus, supra purpureo-niger; subtus niger, violaceo-tinctus; antennis nigris; supra tenuissime pubescens, elytris crebrius parum argute punctatis. Long. 6 mm.

Antennæ extending quite to the hind margin of the thorax, black, a little thickened towards the extremity, the penultimate joint not twice as long as broad. Head rather elongate, about half as broad as the wing-cases, narrowed behind the eyes. Thorax nearly as broad as long, much constricted in front, the basal and lateral margins very distinct, but the latter becomes indistinct at the anterior constriction or impression, the surface very indistinctly punctured and finely pubescent. Elytra closely and rather finely punctate, but the punctuation indistinct, although somewhat rugulose; the pubescence very indistinct. Legs long and slender, nearly black above, deep blue beneath.

Although very different in colour from D. wakefieldi, it is in form, and probably in structure, closely allied thereto.

Greymouth; No. 52, Helms.

I have received specimens of this species, all collected by Mr. Helms, from several entomologists, and it is distributed in collections under the name I have given it in recognition of Mr. Helms' services and liberality.

## Cyphon variegatus, n. s.

Latus, sat convexus, subrotundatus, nitidus, parcius parum subtiliter pubescens, testaceus, capite thoraceque rufo-testaceis, elytris nigro-signatis, antennis ultra medium fere nigris. Long.  $3\frac{1}{2}$  mm.

Antennæ rather short, the four or five basal joints yellow, the others darker, the terminal ones being nearly black; 3rd joint very small and slender; 4th distinctly longer than the following; 5th to 10th differing very little from one another. Head broad, distinctly pubescent, but scarcely punctate. Thorax considerably narrower than the elytra, pubescent, and indistinctly sculptured like the head. Elytra with a distinct punctuation, the punctures moderately close, quite distinct and definite at the base, becoming obsolete towards the apex, and with a rather elongate pubescence, of a yellowish colour, marked with a basal transverse black fascia, a common mark on the middle, which extends backwards along the suture, and unites with an oblique apical mark that encloses a pale space on the outside near the apex of each wing-case. Under side and legs yellow.

The marks on the elytra are often very conspicuous, but sometimes are nearly or quite absent, the basal ones

disappearing first.

The species is closely allied in its structure to C. equalis, Sharp.

Greymouth; Nos. 70 and 72, Helms.

## Techmessa distans, n. s.

Depressa, nigra, parum nitida, antennarum articulorum basibus pallidis; setulis paucis erectis munita; prothorace fortiter transverso, inæquale, fortiter punctato; elytris dense fortiter punctatis. Long. 5—7 mm.

Antennæ elongate and slender, reaching half-way, or more, of the length of the wing-cases, quite black, but with the extreme base or articular portion of each joint, from the 4th onwards, pale yellow. Head coarsely punctate; the vertex behind the eyes not elongate. Thorax strongly transverse, narrower than the wing-cases, rounded at the sides, and narrowed behind; on each side is a large impression, posteriorly somewhat indefinite, and more or less distinctly joined, in front of the scutellum, with its fellow; the surface coarsely and rather closely punctate. Elytra densely, deeply, and coarsely punctate, dull. Legs black.

In the male the 2nd and 3rd joints of the antennæ are

a little shorter than they are in the female.

The species should evidently be placed with T. telephoroides, Bates, in a different section from T. conclor.

Greymouth; No. 251, Helms.

## Rhinorhynchus, n. g. (Rhinomacerides.)

Corpus suboblongum, dense punctatum et pubescens. Caput ante oculos subite et valde constrictum; rostrum tenue, a medio ad apicem paulo latius, deplanatum, oris partibus exsertis. Mandibulæ elongatæ, graciles, falcatæ, extus (et fere certe intus) integres. Antennæ elongatæ, rectæ, subtenues. Elytra sine stria suturali discreta, epipleuris angustis sed sat distinctis, linea externa epipleurali ad basin parum distincta sed post basin bene elevata. Tarsorum unguiculi brevi, ad basin incrassati, itaque in medio dentati apparent.

The very distinct rostrum varies according to the sex, being longer and more slender in the female; it is but little curved; the palpi and mandibles are conspicuously exposed at its extremity. The anterior coxe are quite contiguous, placed at a distance from the front of the prosternum. The ventral sutures are very deep. The tarsi of normal tetramerous structure.

This insect is an undoubted member of the small group Rhinomacerides, and appears, so far as I can judge from the description of the European genus Nemonyx, to be closely allied thereto. I have only before me a single pair of this minute creature, and cannot, therefore, at present fully see its characters. It has some resemblance in general form to Pachyura of the Belidæ, but may be distinguished at a glance by the flattened rostrum and the conspicuously exserted mouthparts.

It is an interesting addition to the New Zealand forms of Rhyncophora. Leconte ('American Naturalist,' July, 1874, p. 391) considers the Rhinomaceridæ as a "synthetic form making the nearest approach in the Rhyncophora to the lower Heteromera, and therefore the representative of old forms clings to an old and synthetic type of vegetation." It will be interesting to discover the habits of the New Zealand representative family, and see whether it supports, as is highly probable, Leconte's theory.

Broun has described (Man. N. Zealand Col.) an insect under the name of *Rhinomacer rufula*, but I cannot say from his description whether or not it is congeneric with

Rhinorhynchus zealandicus.

## Rhinorhynchus zealandicus, n. s.

Minutus, rufescens, elytris plus minusve fusco-rufis, dense fortiter punctatus, conspicue flavo-griseo pubescens, opacus, antennis pedibusque testaceis. Long. (cum rostro porrecto)  $2\frac{3}{4}$  mm.

Mas, rostro breviore, prothoracis vix longitudine, basi punctato, antennæ ultra medium insertæ.

Fem., rostro prothorace paulo longiore, tenuiore, glabro, polito, antennæ fere in medium insertæ.

Antennæ reddish yellow, extending quite as far back as the base of the thorax, not in the least geniculate; the 1st joint rather longer than the 2nd, but scarcely stouter than it; joints 3—8 rather slender; 9—11 forming an elongate, very laxly-jointed club, the joints of which differ but little in length inter se. Thorax much narrower than the after body, rather longer than broad, the sides very gently and evenly rounded. The surface densely, evenly, and coarsely punctured, and with a dense, rather elongate, depressed pubescence. Elytra densely, deeply, and coarsely punctate, with a dense, rather coarse, pubescence, which much conceals the sculpture. Legs yellow, rather short and stout; the tibiæ straight, without spurs or hooks.

Found by Mr. Helms at Greymouth in the spring of 1881.

Anagotus, n. g. (Curculionides, Cylindrorhinidæ).

Rostrum sat elongatum, ad apicem dilatatum, supra antennarum insertionem angulatim prominulo; scrobes obliquæ, profundæ, longe ante oculos desinentes; corpus tuberculatum, prothorax gracilis; pedes elongati, tibiæ simplices, haud mucronatæ, apicibus nullo modo dilatatis.

This is a remarkable insect, having rather the facies of an African ground weevil than of any New Zealand form hitherto discovered, and perhaps the type of a distinct group near the Hipporhinides. The scrobes are continued to the apex of the rostrum, and there, owing to the dilatation of the latter, exposed in front; they are continued obliquely backwards, passing to the under surface, but become obsolete about half-way to the eye. The basal joint of the antennæ reaches to the eye, and is nearly as long as the other joints together; the club is well marked, though slender and elongate. mandibles are without scar, and are not very different from those of Lyperobius. The front coxe are contiguous. The metasternum is short; the 1st ventral segment is in the middle a good deal longer than the 2nd, which is quite twice as long as the 3rd. elongate and slender; tibiæ quite unarmed, not thickened at the apex. Tarsi slender, the 3rd joint scarcely broader than the preceding ones, its apical lobes quite short; it, as well as the two basal joints, rather densely pubescent beneath, with a glabrous space along the middle.

At present this insect may be placed near *Inophleus*, at the head of the *Cylindrorhinide*, till its peculiarities can be more correctly appreciated; it appears to me to have considerable affinities both with the *Amyeterides* and *Hipporhinides*, though differing greatly from the former by the elongate rostrum.

# Anagotus helmsi, n. s.

Niger, indumento sordide fusco vestitus, femoribus versus apicem late albido-cingulatis; prothorace elytrisque tuberculatis. Long. (cum rostro) 18 mm.

Thorax slender, longer than broad, approximating to cylindric, but the upper surface very irregular, with an

elongate elevation in the middle in front; a rather large prominence on each side of this, and other smaller less conspicuous asperate tubercles. After body very convex, very narrow at the base, with a longitudinal series of large tubercles near the suture, and a row of smaller tubercles outside this and marking the part where the sides become perpendicular (these slope even a little inwards), and with other smaller asperities, and with longitudinal series of large punctures or pits, which are indistinct in the spots where the tubercles are much developed. Legs elongate and slender.

This remarkable species has been discovered at Greymouth by Mr. Helms, and a specimen sent to me as No. 133.

## Pentarthrum helmsianum, n. s.

3. Robustum, sat elongatum, nigrum sat nitidum, prothorace crebre fortiter punctato; elytris sat fortiter striato-punctatis; rostro lato, anterius latissime angulariter dilatato, subrhomboidali. Long. 6 mm.

Antennæ black, with the intermediate joints piceous; the basal joint opaque and somewhat twisted, so as to appear emarginate in one aspect. Rostrum very broad, extremely dilated in front, so that the sides project as acute angles, and the front margin is curved; the upper part is rather closely, the anterior more sparingly, punctate; the neck is smooth, and the eyes are not very far from the front of the thorax. This latter part is rather broad, and a good deal rounded at the sides, the surface rather coarsely, moderately closely, evenly punctate and shining. Elytra with impressed striæ, which are distinctly punctate; the interstices scarcely punctate, but somewhat dull and obscurely rugulose. Legs black, robust, all the tibiæ armed at the apex internally with an angular process, which is on the hind legs large and remarkable. The female is unknown.

This peculiar insect will probably ultimately form the type of a genus distinct from *Pentarthrum*, but as it goes very well into that genus, as at present defined, it is not necessary to make a new name for it. The great development of the rostrum reminds one rather of some of the *Brenthidæ* than of a Cossonid. The two individuals before me are quite similar, and I have no

doubt I am correct in considering them to be of the male sex.

Greymouth; No. 227, Helms.

## Didymocantha robusta, n. s.

Fuscula, capite thoraceque rufis, antennis pedibusque rufo-testaceis; elytris nitidis, fortiter punctatis, pubescentia sparsa erecta vestitis, ex parte majore testaceis, argute-fusco signatis. Long. 12½ mm.

Head red, coarsely punctate and much pubescent. Antennæ pale red, their basal portion much pubescent; towards the apex the pubescence becomes gradually less, and is wanting on the apical joint. Thorax red, about as long as broad, the surface very uneven, with a smooth longitudinal space on the middle, on each side of which are coarse punctures; this smooth space does not extend to the front part, which is coarsely punctate; on each side of the middle towards the front there is a very distinct shining tubercle, and externally to this a less distinct sublateral tubercle; the angle at the side behind the middle is very prominent; the surface bears much pale pubescence. Elytra shining, definitely and coarsely punctate, and from each puncture there rises a pallid suberect hair; the punctuation is distant and regular; along the side of the wing-case, from the shoulder to the apex, extends a dark mark, and across the surface stretch two transverse irregular fasciæ of dark colour, the anterior one is angulate, and, as it proceeds from the side to the suture extends forwards, and along the suture extends to the scutellum; the posterior transverse fascia is broad and angulate, and sends a narrow prolongation backwards along the suture to the apex. The femora are red, and stout for this genus; the tibiæ and tarsi yellow; under surface fuscous-red, with very scanty fine white pubescence. The individual before me is of uncertain sex.

The shorter and stouter femora distinguish this insect strongly from *D. sublineata*; probably it is allied to *D. picta*, Bates, a species I have not seen.

Greymouth; No. 130, Helms.

#### Somatidia helmsi, n. s.

Parum convexa, elytris dilatatis, ad apicem attenuatis; thorace parvo, ferrugineo, ad latera nigricante, utrinque tuberculo parvo; elytris nigro-fuscis, ad basin plaga maxima communi pallide ochracea. Long.  $4\frac{1}{2}$  mm.

This curious insect, with very sharply defined coloration, has the body but little clothed with down, the variegation being caused by tinting of the chitinous substance. The thorax is reddish, with the sides darker, the lateral portions coarsely and closely punctured, the middle less distinctly; at each side behind the middle is a small but prominent tubercle, and on the disc, just in front of the middle, are two obscure elevations. Elytra narrowed at the base and apex, the greatest width in front of the middle, of a blackish colour, but with a very large and extremely sharply defined pale basal portion. The surface bears numerous coarse but not deep punctures; on the middle of the pale colour there are four obscure elevations, and on the line of junction of the two colours are four other elevations, two on each side like the anterior set, the external being more indistinct than the internal; the dark posterior portion bears also two small elevations, one in front of the other, on each wing-case. The femora are rather pale at the base, dark at the extremity; the tibiæ are dark at the base, then show a broad pale ring, and their extremity is also pale, as are likewise the tarsi.

Greymouth, found by Mr. Helms.

I have much pleasure in naming this interesting little insect after its discoverer.

## Xylotoles huttoni, n. s.

Parum elongatus, posterius attenuatus, corpore toto cum antennis pedibusque dense tomentoso; pedibus parum elongatis, dense vestitis, femoribus basi superne nudo rufescente; antennis variegatis. Long. 7 mm.

Head very short; antennal tubercles, placed quite on its upper part, prominent; granulation of eyes very coarse. Thorax with a transverse depression behind the front, and another at an equal distance before the base; from the middle of the anterior depression there extends a depression backwards, on each side of which the

surface is rather more elevated, and is densely tomentose with pale grey pubescence, the rest of the surface being covered with darker, but mottled, pubescence; at each side about the middle there is a prominent speck of pure white pubescence. Elytra not prolonged, but broadly dehiscent at apex, densely clothed with dark tomentum, which is, however, speckled and mottled, and bears some small but prominent tufts. Legs and tarsi very densely clothed. Antennæ mottled with greyish spots; the base of each of joints 4—11 yellowish. Under surface densely clothed everywhere with fine pubescence.

This aberrant Xylotoles tends to connect Xylotoles and Tetrorea; although very different, owing to its clothing, from the other species, I do not see any characters that necessitate at present its generic isolation, unless the coarser granulation of the eyes and shorter head be considered such.

I received a single individual from Prof. Hutton, after whom I have named it, some years ago (1877). It was found by him in Otago.

## Hybolasius deplanatus, n. s.

Parvus, oblongus, subdepressus, fuscus, superne rufescens, antennis pedibusque rufis; prothorace dense subtiliterque granuloso punctato, vittis tribus flavescentibus parum argutis pubescentiæ ornatis, ad latera angulatis; elytris parum inæqualibus. Long. 3—4 mm.

Antennæ red, slender, sparingly hispid. Head infuscate-red. Thorax very transverse, strongly angularly prominent at each side, the surface densely covered with minute asperities, which are more than usually visible on account of the scanty pubescence; this latter is yellowish in colour, and arranged so as to form three indistinct longitudinal bands. Elytra reddish, more or less distinctly marked with fuscous along the suture; this colour beyond the middle rather abruptly turned towards the sides, and bounded about the middle by a very obscure longitudinal elevation; the surface rather sparingly pubescent, and irregularly punctate, but almost destitute of erect setæ. Legs clear red.

This species is allied to *H. bellicosus*, Broun, but is more brightly coloured, and of more slender build, with the antennæ and upper surface less hispid, &c.

Greymouth; Helms.

#### Tetrorea sellata, n. s.

Sat elongata fere gracilis, nigricans, pube variegata vestita, elytris ante medium plaga pallidiore oblique descendente, pedibus articulisque 1—4 antennarum maculatis, harum articulis 5—10 nigro-fuscis, singulo ad basin late pallido-annulato; elytris utrinque pone scutellum tuberculo parum elevato, singulo ad apicem rotundato; antennis pedibusque fere gracilibus. Long. 11—12 mm.

Eyes comparatively little separated on the vertex. Thorax with large lateral prominence, and with broad tubercle on each side of the middle. Scutellum clothed with black pile. Each wing-case has an obscure elevation near the base, and numerous large punctures about the scutellum; the lateral portions are also a good deal punctate; the surface is variegate with obscurely-coloured down, and there is a patch of pale colour descending obliquely from behind the shoulder, and meeting its fellow of the opposite side just in front of the middle. The legs are rather slender, and bear only a few erect white setæ.

Greymouth; Helms.

This departs from the typical species by the form of the apices of the elytra, and by the eyes being less separated on the vertex, but it cannot with advantage be separated at present as a distinct genus, especially as it bears a great general resemblance to T. discedens. The colour of the down on the scutellum, independently of more important characters, permits it to be distinguished at a glance from T. discedens.

## Tetrorea discedens, n. s.

Pube variegata, ex parte majore fusco-olivacea, vestita, elytris pone basin plaga magna communi pallidiore, antennis pedibusque conspicue maculatis, abdomine utrinque flavo-maculato; prothorace in medio plaga nuda, nitida; elytris utrinque pone scutellum tuberculo elevato, etiam ad medium et ante apicem penicilla parva instructis. Long. 11—13 mm.

Antennæ reaching slightly beyond the extremity of the body, very distinctly maculate, the basal joints more or less ferruginous. Thorax with an angular prominence on each side, with a small shining space on the middle of the disc, and in front of this, on each side, a not very distinct tubercle. Scutellum clothed with ochreous scales along the margin. Elytra not prolonged at the apex, but distinctly dehiscent there, the apex of each not rounded, but rather obscurely and a little obliquely truncate. Tibiæ sparingly clothed with fine setæ.

One individual, which I believe to be a male, is larger and more robustly formed, and has the legs thicker, and the tibiæ more setose. The colour is variable, the large common patch on the elytra being sometimes white, in other cases only a little paler than the general colour.

Otago; Prof. Hutton. Greymouth; Helms.

#### Mesolamia, n. g.

Corpus sat robustum, subtile tomentosum. Caput facie perpendiculari brevissima. Oculi mediocriter granulati. Antennæ (feminæ?) corpore breviores, sat robustæ, articulo basali parum elongato, et parum dilatato, quam tertio paulo breviore. Thorax ad latera angulatus. Elytra apicibus rotundatis. Pedes breves, femora breviora crassa. Cetera fere ut in *Tetrorea*.

The insect for which I have established this genus has given me some trouble on account of its want of special resemblance to any other of the New Zealand Lamiades, while at the same time it possesses no striking peculiarities of its own. It is perhaps nearest to Tetrorea, from which it differs by the more finely facetted eyes, as well as by the different form and the peculiar head. This last character renders the genus of special interest, for the shape of the head only exhibits the Lamia characteristics in a comparatively imperfect manner. The perpendicular part of the head is quite short, and is not abruptly differentiated from the vertex, the middle portion in fact passing quite gradually into the plane of the vertex; both the vertex and front are canaliculate along the middle, and a fine transverse suture can be detected in front of the eyes. The anterior coxal cavities have externally a small transverse fissure. The external structure of the middle cavities is not easily ascertained without dissection, the surface there being uneven in consequence of the large size of the globose coxæ; but it appears to me the side wing of the mesosternum does not quite meet the metasternum. As the general structure of the under surface is not very different from that of *Tetrorea*, it may be placed next to that form.

#### Mesolamia marmorata, n. s.

Fusco-rufa, pube flavescenti subtili dense vestita, maculis fusco-rufis adspersa; elytris parum inæqualibus, singulo ad apicem rotundato. Long. 9—12 mm.

The surface is apparently of a dark or obscure red colour, closely covered with a fine, closely adpressed, yellow pile, but in parts this pile is replaced by a pile of a darker colour, thus giving rise to a maculated appearance, most of the spots being of small size and round in shape. The antennæ are rather stout, and are not hispid; each joint bears rather scanty pale pile on the basal portion, and this therefore appears paler than the apical part of each joint. The vertex is deeply channelled, and between the antennæ there is a rather deep depression, which is continued on the front of the head as a fine channel. The thorax is narrower than the elytra, and is not so long as broad; on each side it is much dilated to form a large angular prominence; the surface is not at all tuberculate, only a little uneven, and bears numerous small spots of the kind already described. The surface of each elytron is elevated near the base on each side of the scutellum, and there is also on the middle of each an obscure longitudinal folding or elevation; there is a large, irregular, curved, dark mark on each, as well as numerous small spots. The rather stout, short, legs are destitute of setæ, but are clothed with fine pile; the femora are a little maculate, and there is a dark mark on each tibia below the middle.

The female has the apical ventral segment very largely impressed, and at each side bears elongate pubescence, which projects towards the middle, and so much conceals the depression. The male is unknown.

Two specimens of this species were sent from Dunedin by Prof. Hutton in 1877.

#### Chalcolampra speculifera, n. s.

Oblongo-ovalis, sat convexa, testacea, elytris plagis magnis nitidissimis fusco-æneis, antennarum basi fusce-scente, pedibus geniculis nigris. Long. 8, lat. 4 mm.

Antennæ slender and elongate, reaching half-way to the extremity of the wing-cases. Prothorax transverse, distinctly narrower than the elytra, the sides nearly straight, very finely and evenly margined, the base unmargined, the front rather broadly margined, the surface rather finely and irregularly punctate. Scutellum shining and impunctate. Elytra yellow, but each with three large and extremely highly polished spaces of a dusky brassy colour; one of these is situated near the scutellum, and is but little separated from its fellow of the other side; it is extended backwards along the suture, but is here less well defined and conspicuous, till it joins the apical patch; this latter is very brilliant, and sends off externally towards the front a small prolongation, which nearly or quite unites with the third or lateral mirror; this is placed near but does not touch the side, and in front is prolonged as far as the shoulder; there is also a minute dark spot on the shoulder; the yellow portion of the wing-cases is rather coarsely and irregularly punctate: the apices are a little produced, and very distinctly truncate. The legs are yellow, with the knees broadly marked with black.

This remarkable insect is one of the most interesting of Mr. Helms' Greymouth captures, as it introduces us to a new feature in the New Zealand Coleoptera, and one which I had hitherto supposed to be quite wanting, riz., the existence of true Chrysomelidæ of Chapuis' division Cycliques. The genus Chalcolampra is well represented in Australia, and has some species in Austro-Malasia.

## Allocharis, n. g. (? Phyllocharites, Chap.)

Elytra libera. Metasternum sat breve, quam pronoto breviore. Acetabula antica occlusa. Palpi maxillares breves, haud incrassati, articulo ultimo quam precedente angustiore et paulo breviore, apice obtuse acuminato. Antennæ parum graciles sat elongatæ. Pedes omnes distantes, posteriores valde distantes. Mesosternum inter pro- et metasterna distinctum. Tibiæ haud

canaliculate; tarsorum articulo 30 ad apicem sat profunde emarginato. Facies inter *Chrysomelam* et *Prasocurem* quasi intermedia.

This is an anomalous insect, but on the whole is probably most allied to the *Phyllocharites* of Chapuis. The metasternum is not so abbreviate as in *Cyrtonus*, its length being just intermediate between those of *Cyrtonus* and *Gonioctena*. The metasternum is brought up to the level of the middle of the pro- and metasterna, and exposed between them as a curved linear piece. The claws of the tarsi are short, and armed at the base with an angular dilatation. The maxillary palpi do not differ much from those of *Cyrtonus*. The elytra are not soldered, but I am unable to say whether wings are present or not.

## Allocharis marginata, n. s.

Oblongo-ovalis, sat elongata, convexa, nitida, fuscoænea, elytris rufo-marginatis, antennis palpis pedibusque testaceis; elytris subtiliter seriatim punctatis, interstitiis fere impunctatis. Long.  $5\frac{1}{2}$ , lat.  $2\frac{7}{8}$  mm.

Antennæ clear red, stout, rather longer than head and thorax; 2nd joint quite as broad as 3rd, and distinctly shorter than it: 6th a little shorter than the contiguous joints, and rather longer than broad. Head much immersed in thorax, its surface distinctly but irregularly punctate; eyes small, coarsely granulate. Thorax rather strongly transverse, but little emarginate in front, a little narrower than the elytra, the colour shining brassy, becoming rufescent or fuscescent towards the sides, the surface rather finely and distantly punctate; the lateral and basal margins are fine but distinct throughout; the front margin is even finer than the others, and is obsolete in the middle. Scutellum not large, rather broad, curvilinearly triangular, impunctate. Elytra of an obscure brassy colour, with the sides broadly and distinctly rufescent, and the base more obscurely so, not at all striate, but bearing each nine series of fine punctures, and with some other very fine and distant punctures. Legs rather short and stout, reddish vellow.

I received a single specimen of this rather obscure looking but interesting insect from C. M. Wakefield, Esq. It is labelled "Craigie burn, Powell."